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Terms	Documents
L1 same promoter	8

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US Pre-Grant Publication Full-Text Database
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EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

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L2

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<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
	<i>DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ</i>		
<u>L2</u>	L1 same promoter	8	<u>L2</u>
<u>L1</u>	ABC1 or ABCB1	124	<u>L1</u>

END OF SEARCH HISTORY

WEST[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 8 of 8 returned.**☐ 1. Document ID: US 20030021802 A1

L2: Entry 1 of 8

File: PGPB

Jan 30, 2003

PGPUB-DOCUMENT-NUMBER: 20030021802

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030021802 A1

TITLE: Lawsonia intracellularis proteins, and related methods and materials

PUBLICATION-DATE: January 30, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rosey, Everett L.	Preston	CT	US	

US-CL-CURRENT: [424/190.1](#); [435/219](#), [435/252.3](#), [435/320.1](#), [435/69.3](#), [536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 2. Document ID: US 20020146792 A1

L2: Entry 2 of 8

File: PGPB

Oct 10, 2002

PGPUB-DOCUMENT-NUMBER: 20020146792

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020146792 A1

TITLE: Regulatory nucleic acid for the ABC1 gene, molecules modifying its activity and therapeutic uses

PUBLICATION-DATE: October 10, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rosier-Montus, Marie-Francoise	Antony	MD	FR	
Prades, Catherine	Thais	MD	FR	
Lemoine, Cendrine	Massy	MD	FR	
Naudin, Laurent	Etampes		FR	
Denefle, Patrice	Saint Maur		FR	
Duverger, Nicolas	Paris		FR	
Brewer, Bryan	Potomac		US	
Remaley, Alan	Bethesda		US	
Santamarina-Fojo, Sylvia	Potomac		US	

US-CL-CURRENT: [435/189](#); [435/320.1](#), [435/325](#), [435/6](#), [536/23.2](#), [800/8](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Image
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☐ 3. Document ID: US 20020076754 A1

L2: Entry 3 of 8

File: PGPB

Jun 20, 2002

PGPUB-DOCUMENT-NUMBER: 20020076754
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020076754 A1

TITLE: Overcoming AAV vector size limitation through viral DNA hetero-dimerization

PUBLICATION-DATE: June 20, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Sun, Liangwu	Pittsburgh	PA	US	
Li, Juan	Pittsburgh	PA	US	
Xiao, Xiao	Wexfoxd	PA	US	

US-CL-CURRENT: 435/69.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 4. Document ID: US 6225525 B1

L2: Entry 4 of 8

File: USPT

May 1, 2001

US-PAT-NO: 6225525
DOCUMENT-IDENTIFIER: US 6225525 B1

TITLE: ATP-binding cassette transporter (ABC1) modified transgenic mice

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 5. Document ID: EP 1203588 A1

L2: Entry 5 of 8

File: EPAB

May 8, 2002

PUB-NO: EP001203588A1
DOCUMENT-IDENTIFIER: EP 1203588 A1
TITLE: Sterol-independent regulation of ABC1 promoter via oncostatinM

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWIC	Draw Desc	Image
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☐ 6. Document ID: WO 200183506 A1 AU 200159209 A

L2: Entry 6 of 8

File: DWPI

Nov 8, 2001

DERWENT-ACC-NO: 2002-049334
DERWENT-WEEK: 200222
COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Novel isolated human large ATP-binding cassette transporter 1 promoter capable of directing transcription of heterologous coding sequence positioned

downstream to it, useful for expressing foreign DNA in host cells

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KMOC	Draw Desc	Image
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☐ 7. Document ID: EP 1239848 A2 WO 200115676 A2 AU 200112919 A

L2: Entry 7 of 8

File: DWPI

Sep 18, 2002

DERWENT-ACC-NO: 2001-244356

DERWENT-WEEK: 200269

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Treating a lower than normal high density lipoprotein-cholesterol (HDL-C) level, a higher than normal triglyceride level, or a cardiovascular disease, by administering a compound that modulates LXR- or RXR-mediated transcriptional activity

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KMOC	Draw Desc	Image
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☐ 8. Document ID: WO 200055318 A2 AU 200038327 A EP 1100895 A2

L2: Entry 8 of 8

File: DWPI

Sep 21, 2000

DERWENT-ACC-NO: 2000-587528

DERWENT-WEEK: 200055

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: New ABC1 polypeptide is useful for treating diseases associated with ABC1 biological activity, e.g. Alzheimer's disease, Huntington's disease and cancer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KMOC	Draw Desc	Image
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Terms	Documents
L1 same promoter	8

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(FILE 'HOME' ENTERED AT 12:20:59 ON 07 MAR 2003)

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SEA ABC1 OR ABCB1

1 FILE ADISCTI
3 FILE ADISINSIGHT
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13 FILE AGRICOLA
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698 FILE PROMT
167 FILE SCISEARCH
76 FILE TOXCENTER
89 FILE USPATFULL
2 FILE USPAT2
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32 FILE WPINDEX

L1 QUE ABC1 OR ABCB1

FILE 'PROMT, CAPLUS, SCISEARCH, BIOSIS, MEDLINE, EMBASE' ENTERED AT 12:22:07 ON 07 MAR 2003

L2 78 S L1 AND PROMOTER

L3 37 S L2 AND SEQUENCE

L4 23 DUP REM L3 (14 DUPLICATES REMOVED)



=> d 14 ibib ab 1-23

L4 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:353609 CAPLUS

DOCUMENT NUMBER: 136:364963

TITLE: Polymorphisms in the human ABCA1 gene associated with disorders of lipid transport and their diagnostic and therapeutic uses

INVENTOR(S): Deneffe, Patrice; Rosier, Marie-Francoise; Arnould-Reguigne, Isabelle; Duverger, Nicolas; Cambien, Francois

PATENT ASSIGNEE(S): Aventis Pharma S.A., Fr.; Institut National de la Sante et de la Recherche Medicale (INSERM)

SOURCE: PCT Int. Appl., 296 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002036770	A2	20020510	WO 2001-FR3182	20011012
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2815970	A1	20020503	FR 2000-14037	20001031
AU 2002010636	A5	20020515	AU 2002-10636	20011012
PRIORITY APPLN. INFO.:			FR 2000-14037	A 20001031
			US 2000-254108P	P 20001211
			WO 2001-FR3182	W 20011012

AB The invention concerns isolated nucleic acids coding for the ABCA1 carrier protein and comprising **sequence** polymorphic variations, and polypeptides derived from the human ABCA1 carrier and contg. polymorphic amino acids. The invention also concerns allele-specific primers and probes hybridizing to regions flanking or contg. said polymorphic sites or positions, methods and kits or sets for analyzing the allelism variations affecting the ABCA1 gene and finally the use of polymorphisms of the human ABCA1 gene for diagnosing a disease or a predisposition to a disease, in particular related to the concn. of plasmatic cholesterol High D. Lipoprotein (HDL), as for example is the case in familial HDL deficiencies such as Tangier disease, myocardial infarction, atherosclerosis, and other cardiovascular diseases.

L4 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:466615 CAPLUS

DOCUMENT NUMBER: 137:42598

TITLE: Methods of overcoming adeno-associated virus vector size limitation through viral DNA hetero-dimerization

INVENTOR(S): Sun, Liangwu; Li, Juan; Xiao, Xiao

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 19 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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AB The present invention provides a method for overcoming the packaging limitations of recombinant adeno-assocd. virus (AAV) particles through AAV DNA heterodimer formation. Specifically, the invention discloses that an expressed nucleic acid, typically a portion of a gene encoding a full-length therapeutic protein, or a functional deriv. thereof, is split into two or more fragments by the insertion of one or more introns. Each intron is then split and each of the gene portions are inserted between AAV inverted terminal repeats (ITRs) for packaging into recombinant adeno-assocd. virus particles. The recombinant viral particles are then co-infected into a target cell. Once inside the cell, the viral vectors form head-to-tail heterodimers through **sequence** homol. of the inverted terminal repeats, thereby re-forming the intron. During mRNA maturation, the intron is spliced from the continuous DNA mol., removing the intron and, thus, the intervening ITR **sequences**, thereby restoring the precise coding **sequence** of the expressed nucleic acid: The invention further provides virus vectors expressing .beta.-galactosidase, dystrophin, **ABC1**, and factor VIII.

PATENT INFORMATION:

AB A method and kit for detecting endocrine-disrupting chems. using DNA microarrays are claimed. The method comprises prepg. a nucleic acid sample contg. mRNAs or cDNAs originating in cells, tissues, or organisms which have been brought into contact with a sample contg. the endocrine disruptor. The nucleic acid sample is hybridized with DNA microarrays having genes affected by the endocrine disruptor or DNA fragments originating in these genes have been fixed. The results obtained are then compared with the results obtained with the control sample to select the gene affected by the endocrine disruptor. Genes whose expression is altered by tri-Bu tin, 4-octaphenol, 4-nonylphenol, di-N-Bu phthalate, dichlorohexyl phthalate, octachlorostyrene, benzophenone, diethylhexyl phthalate, diethylstilbestrol (DES), and 17-.beta. estradiol (E2), were found in mice by DNA chip anal.

CORPORATE SOURCE: Institute of Molecular and Cellular Biosciences, The

SOURCE: University of Tokyo, Bunkyo-ku, Tokyo, 113-0032, Japan
Progress in Biotechnology (2002), 22 (Molecular Anatomy
of Cellular Systems), 105-120
CODEN: PBITE3; ISSN: 0921-0423
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review. Plastids, plant organelles including chloroplasts, are considered to have originated from an endosymbiotic event of ancient cyanobacteria, the primeval inventor of the oxygen-generating photosynthetic systems, in other eukaryotic cells. The vestiges of cyanobacterial genetic traits are found in both plastid and nuclear genomes. Significant numbers of original cyanobacterial genes evolutionarily disappeared from the plastid genome of extant plant cells; some have been lost ever because of the dispensability, and the others have translocated onto the nuclear genome presumably for the regulatory reasons. One of the obstacles to unveil the coordinated gene expression between the two genomic systems, plastid and nucleus, was absence of the genetic information about the sigma subunit, a key factor of the plastid-encoded RNA polymerase (PEP). Actually all of the genes encoding for the multi-subunit core enzyme are found in the plastid genome, but the sigma factor gene is not. By scrutinizing the epigraphs depicted in the common **sequences** of sigma factors in cyanobacteria, we have successfully identified nuclear genes (sig) encoding for plastid sigma factors. This strategy was first adopted for unicellular red algae, *Cyanidium caldarium* RK-1, and then for three higher plants; two of typical dicotyledonous, *Arabidopsis thaliana* and *Nicotiana tabacum*, and one of monocotyledonous, *Oryza sativa*. Open reading frames found in the cDNA clones of these nuclear genes indicate that the N-terminal regions of the gene products had amino acid **sequences** typical to the plastid-targeting transit peptides. Furthermore, a transient expression assay of GFP fusions in *Arabidopsis* protoplasts showed that the N-termini of these sig gene products functioned as chloroplast-targeting signals. The sigA- or sigB-**promoter** fused with a uidA reporter in the transgenic *Arabidopsis*, was similarly activated at various tissues of the plants, such as cotyledons, hypocotyls, rosette leaves, sepals and siliques, but not at roots, seed, or other flower organs. **Promoters** including those from *Cyanidium*, *Arabidopsis*, and *Nicotiana* were repeatedly activated under continuous light, somewhat similar to endogenous rhythms. An *Arabidopsis* mutant (*abc1*) having a pale-green leaf phenotype presumably by the impaired sigB (= sig2) function was isolated as a T-DNA insertion clone. This result provides direct evidence that a nuclear-derived prokaryotic-like SigB protein plays a critical role in the coordination of the two genomes for plastid development.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 23 SCISEARCH COPYRIGHT 2003 ISI (R)

ACCESSION NUMBER: 2002:628040 SCISEARCH

THE GENUINE ARTICLE: 576TM

TITLE: Cloning and characterization of the gene encoding the PEPF endopeptidase from the aquatic bacterium *Caulobacter crescentus*

AUTHOR: Braz V S; Lang E A S; Marques M V (Reprint)

CORPORATE SOURCE: Univ Sao Paulo, Inst Ciencias Biomed, Dept Microbiol, Av Prof Lineu Prestes 1374, BR-05508900 Sao Paulo, Brazil (Reprint); Univ Sao Paulo, Inst Ciencias Biomed, Dept Microbiol, BR-05508900 Sao Paulo, Brazil

COUNTRY OF AUTHOR: Brazil

SOURCE: BRAZILIAN JOURNAL OF MICROBIOLOGY, (JAN-MAR 2002) Vol. 33, No. 1, pp. 84-91.
Publisher: SOC BRASILEIRA MICROBIOLOGIA, AV PROF LINEU PRESTES, 1374, 05508 SAO PAULO, BRAZIL.
ISSN: 1517-8382.

DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 25

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The metallopeptidases have a very important role in bacteria, being involved in several processes that rely on protein turnover. such as nutrition, degradation of signal peptides. protein localization and virulence. We have cloned and characterized the gene of the metalloendopeptidase PepF from the aquatic bacterium *Caulobacter crescentus*. The gene upstream of pepF (orf1) encodes a conserved hypothetical protein found in *Mycobacterium* and *Streptomyces*. pepF is co-transcribed with the gene downstream (orf3), which encodes a protein that belongs to the ABC1 protein kinase family, suggesting that these two proteins may share a common function in the cell. The *C. crescentus* PepF protein possesses the conserved HEXGH motif present in zinc binding domains of PepF homologs. Disruption of the pepF gene by insertion of a vector **sequence** did not produced any growth defect, but the mutant strain possesses only 30% of the specific activity of endopeptidases present in the wild type strain. Deletions and point mutations in the regulatory region showed that there are two putative **promoter** regions, and the operon expression is independent of the transcription regulator CtrA. The results indicate that PepF is not essential for either growth or development of this bacterium using peptides as the sole carbon source, suggesting that other peptidases can be sharing this function.

L4 ANSWER 6 OF 23 PROMT COPYRIGHT 2003 Gale Group

ACCESSION NUMBER: 2001:165878 PROMT
TITLE: EUROPEAN PATENT DISCLOSURES. (Brief Article)
SOURCE: BIOWORLD Today, (27 Feb 2001) Vol. 12, No. 39.
PUBLISHER: American Health Consultants, Inc.
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 2102

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB January 3 (EP); December 28 (WO)
THIS IS THE FULL TEXT: COPYRIGHT 2001 American Health Consultants, Inc.

Subscription: \$1350.00 per year. Published daily (5 times a week).

L4 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:816903 CAPLUS
DOCUMENT NUMBER: 135:353864
TITLE: The **promoter** region of the ABC1 gene and therapeutic modulation of ABC1 gene expression
INVENTOR(S): Rosier-Montus, Marie-Francoise; Prades, Catherine; Lemoine, Cendrine; Naudin, Laurent; Deneffe, Patrice; Brewer, Bryan; Duverger, Nicolas; Remaley, Alan; Santamarina-Fojo, Silvia
PATENT ASSIGNEE(S): Aventis Pharma S.A., Fr.
SOURCE: PCT Int. Appl., 152 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001083746	A2	20011108	WO 2001-EP5488	20010502
WO 2001083746	A3	20020627		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
 HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
 LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
 RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
 VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

FR 2809414 A1 20011130 FR 2001-5886 20010502
 US 2002146792 A1 20021010 US 2001-846456 20010502
 EP 1280911 A2 20030205 EP 2001-943361 20010502

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

NO 2002005265 A 20021218 NO 2002-5265 20021101

PRIORITY APPLN. INFO.: US 2000-201280P P 20000502
 WO 2001-EP5488 W 20010502

AB The present invention concerns a nucleic acid which is capable of regulating the transcription of the **ABC1** gene, which is a causal gene for pathologies linked to a dysfunctioning of cholesterol metab., inducing diseases such as atherosclerosis. The invention also relates to nucleotide constructs comprising a polynucleotide which encodes a polypeptide or a nucleic acid of interest, placed under the control a regulatory nucleic acid for the **ABC1** gene. The invention also relates to recombinant vectors, transformed host cells and nonhuman transgenic mammals comprising a nucleic acid which regulates the transcription of the **ABC1** gene or an abovementioned nucleotide construct, as well as methods for screening mols. or substances which are capable of modifying the activity of the regulatory nucleic acid for the **ABC1** gene. A reporter gene assay is used to screen for effectors of gene expression from the **ABC1 promoter**. An LXR element and an E box were found to be important for **promoter** function.

L4 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:816687 CAPLUS

DOCUMENT NUMBER: 135:353892

TITLE: Nucleotide **sequence** of human **ABC1 promoter** and assays based thereon

INVENTOR(S): Tall, Alan R.

PATENT ASSIGNEE(S): The Trustees of Columbia University In the City of New York, USA

SOURCE: PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001083506	A1	20011108	WO 2001-US13654	20010427

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
 HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
 LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
 RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-560372 A 20000428

AB Disclosed is the **sequence** of the human **ABC1 promoter**, a method for expressing foreign DNA in host cells using the human **ABC1 promoter**, including a method of detg.

whether a chem. not previously known to be a modulator of the human **ABC1** gene, and transcriptionally modulates the expression of the human **ABC1** gene. Also disclosed is a sterol-responsive region of the human **ABC1 promoter**, along with a showing that it is activated by hydroxysterols and 9-cis-retinoic acid, implicating a mechanism of activation involving LXR/RXR heterodimers.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:167790 CAPLUS

DOCUMENT NUMBER: 134:217169

TITLE: Oxysterols for modulating HDL cholesterol and triglyceride levels by modulating LXR-mediated transcription

INVENTOR(S): Hayden, Michael R.; Brooks-Wilson, Angela R.; Pimstone, Simon N.; Clee, Susanne M.

PATENT ASSIGNEE(S): University of British Columbia, Can.; Xenon Genetics, Inc.

SOURCE: PCT Int. Appl., 316 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001015676	A2	20010308	WO 2000-IB1492	20000901
WO 2001015676	A3	20020725		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1239848	A2	20020918	EP 2000-974705	20000901
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			

PRIORITY APPLN. INFO.: US 1999-151977P P 19990901
US 2000-526193 A 20000315
US 2000-213958P P 20000623
WO 2000-IB1492 W 20000901

AB The invention features methods for treating patients having low HDL, a higher than normal triglyceride level, or a cardiovascular disease by administering compds. that modulate **ABC1** expression or activity. Compds. of the invention include oxysterols that modulate LXR-mediated transcription.

L4 ANSWER 10 OF 23 MEDLINE

ACCESSION NUMBER: 2001200644 MEDLINE

DOCUMENT NUMBER: 21184766 PubMed ID: 11287605

TITLE: Identification of liver X receptor-retinoid X receptor as an activator of the sterol regulatory element-binding protein 1c gene **promoter**.

AUTHOR: Yoshikawa T; Shimano H; Amemiya-Kudo M; Yahagi N; Hasty A H; Matsuzaka T; Okazaki H; Tamura Y; Iizuka Y; Ohashi K; Osuga J; Harada K; Gotoda T; Kimura S; Ishibashi S; Yamada N

CORPORATE SOURCE: Department of Metabolic Diseases, University of Tokyo, Bunkyo-ku, Tokyo 113-8655, Japan.

SOURCE: MOLECULAR AND CELLULAR BIOLOGY, (2001 May) 21 (9)
2991-3000.
Journal code: 8109087. ISSN: 0270-7306.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200105
ENTRY DATE: Entered STN: 20010521
Last Updated on STN: 20030204
Entered Medline: 20010517

AB In an attempt to identify transcription factors which activate sterol-regulatory element-binding protein 1c (SREBP-1c) transcription, we screened an expression cDNA library from adipose tissue of SREBP-1 knockout mice using a reporter gene containing the 2.6-kb mouse SREBP-1 gene **promoter**. We cloned and identified the oxysterol receptors liver X receptor (LXRalpha) and LXRbeta as strong activators of the mouse SREBP-1c **promoter**. In the transfection studies, expression of either LXRalpha or -beta activated the SREBP-1c **promoter** -luciferase gene in a dose-dependent manner. Deletion and mutation studies, as well as gel mobility shift assays, located an LXR response element complex consisting of two new LXR-binding motifs which showed high similarity to an LXR response element recently found in the **ABC1** gene **promoter**, a reverse cholesterol transporter. Addition of an LXR ligand, 22(R)-hydroxycholesterol, increased the **promoter** activity. Coexpression of retinoid X receptor (RXR), a heterodimeric partner, and its ligand 9-cis-retinoic acid also synergistically activated the SREBP-1c **promoter**. In HepG2 cells, SREBP-1c mRNA and precursor protein levels were induced by treatment with 22(R)-hydroxycholesterol and 9-cis-retinoic acid, confirming that endogenous LXR-RXR activation can induce endogenous SREBP-1c expression. The activation of SREBP-1c by LXR is associated with a slight increase in nuclear SREBP-1c, resulting in activation of the gene for fatty acid synthase, one of its downstream genes, as measured by the luciferase assay. These data demonstrate that LXR-RXR can modify the expression of genes for lipogenic enzymes by regulating SREBP-1c expression, providing a novel link between fatty acid and cholesterol metabolism.

L4 ANSWER 11 OF 23 SCISEARCH COPYRIGHT 2003 ISI (R) DUPLICATE 1

ACCESSION NUMBER: 2001:856946 SCISEARCH

THE GENUINE ARTICLE: 484LW

TITLE: An Arabidopsis sigma factor (SIG2)-dependent expression of plastid-encoded tRNAs in chloroplasts

AUTHOR: Kanamaru K; Nagashima A; Fujiwara M; Shimada H; Shirano Y; Nakabayashi K; Shibata D; Tanaka K; Takahashi H (Reprint)

CORPORATE SOURCE: Univ Tokyo, Inst Mol & Cellular Biosci, Dept Mol Biol, Mol Genet Lab, Tokyo 1130032, Japan (Reprint); Tokyo Inst Technol, Dept Biol Sci, Yokohama, Kanagawa 2260026, Japan; Mitsui Plant Biotechnol Res Inst, Tsukuba, Ibaraki 3050047, Japan; Univ Tokyo, Grad Sch Sci, Dept Sci Biol, Tokyo 1130033, Japan

COUNTRY OF AUTHOR: Japan

SOURCE: PLANT AND CELL PHYSIOLOGY, (OCT 2001) Vol. 42, No. 10, pp. 1034-1043.

Publisher: OXFORD UNIV PRESS, GREAT CLARENDON ST, OXFORD OX2 6DP, ENGLAND.

ISSN: 0032-0781.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 49

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB A eubacteria-type RNA polymerase (PEP) plays crucial roles for chloroplast development in higher plants. The core subunits are encoded on plastid DNA (rpo genes) while the regulatory sigma factors are encoded on

the nuclear DNA (SIG genes). However, the definite gene specificity of each sigma factor is unknown. We recently identified an Arabidopsis recessive pale-green mutant **abc1** in which TDNA is inserted in SIG2 (sigB). In this mutant, almost normal etioplasts were developed under dark conditions while the small chloroplasts with poor thylakoid membranes and stacked lamellar were developed under light conditions. The sig2-1 mutant was deficient in accumulating enough photosynthetic and photosynthesis-related proteins as well as chlorophyll. However, mRNAs of their structural genes were not significantly reduced. Further analyses revealed that several plastid-encoded tRNAs including trnE-UUC that has dual function for protein and ALA biosyntheses were drastically reduced in the sig2-1 mutant. In contrast, nucleus-encoded T7 phage-type RNA polymerase (TNEP)dependent gene transcripts were steadily accumulated in the mutant. These results indicate that progress of chloroplast development requires SIG2-dependent expression of plastid genes, particularly some of the tRNA genes.

L4 ANSWER 12 OF 23 PROMT COPYRIGHT 2003 Gale Group

ACCESSION NUMBER: 2000:991956 PROMT
 TITLE: EUROPEAN PATENT DISCLOSURES. (Brief Article)
 SOURCE: BIOWORLD Today, (10 Nov 2000) Vol. 11, No. 219.
 PUBLISHER: American Health Consultants, Inc.
 DOCUMENT TYPE: Newsletter
 LANGUAGE: English
 WORD COUNT: 1933

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB September 21 (WO)
 THIS IS THE FULL TEXT: COPYRIGHT 2000 American Health Consultants, Inc.

Subscription: \$1350.00 per year. Published daily (5 times a week).

L4 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:911440 CAPLUS
 DOCUMENT NUMBER: 134:81739
 TITLE: Compositions and methods for increasing cholesterol efflux and raising HDL using human ATP binding cassette transporter protein **ABC1**
 INVENTOR(S): Lawn, Richard M.; Wade, David; Garvin, Michael
 PATENT ASSIGNEE(S): CV Therapeutics, Inc., USA
 SOURCE: PCT Int. Appl., 214 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000078972	A2	20001228	WO 2000-US16765	20000616
WO 2000078972	A3	20020502		
WO 2000078972	C2	20020718		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
BR 2000011753	A	20020430	BR 2000-11753	20000616
EP 1218515	A2	20020703	EP 2000-942914	20000616
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL
 NO 2001006114 A 20020212 NO 2001-6114 20011214
 PRIORITY APPLN. INFO.: US 1999-140264P P 19990618
 US 1999-153872P P 19990914
 US 1999-166573P P 19991119
 WO 2000-US16765 W 20000616

AB The present invention relates to novel human **ABC1** polypeptides and nucleic acid mols. encoding the same. The invention also relates to recombinant vectors, host cells, and compns. comprising **ABC1** polynucleotides, as well as to methods for producing **ABC1** polypeptides. The invention also relates to antibodies that bind specifically to **ABC1** polypeptides. In addn., the invention relates to methods for increasing cholesterol efflux as well as to methods for increasing **ABC1** expression and activity. The present invention further relates to methods for identifying compds. that modulate the expression of **ABC1** and methods for detecting the comparative level of **ABC1** polypeptides and polynucleotides in a mammalian subject. The present invention also provides kits and compns. suitable for screening compds. to det. the **ABC1** expression modulating activity of the compd., as well as kits and compns. suitable to det. whether a compd. modulates **ABC1**-dependent cholesterol efflux.

L4 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:911439 CAPLUS

DOCUMENT NUMBER: 134:67162

TITLE: Compositions and methods for increasing cholesterol efflux and raising HDL using ATP binding cassette transporter protein **ABC1**

INVENTOR(S): Lawn, Richard M.; Wade, David; Oram, John F.; Garvin, Michael

PATENT ASSIGNEE(S): CV Therapeutics, Inc., USA; University of Washington

SOURCE: PCT Int. Appl., 210 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000078971	A2	20001228	WO 2000-US16591	20000616
WO 2000078971	A3	20020117		
W:		AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
RW:		GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
EP 1190065	A2	20020327	EP 2000-942867	20000616
R:		AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO		
BR 2000011696	A	20020430	BR 2000-11696	20000616
NO 2001006121	A	20020212	NO 2001-6121	20011214
PRIORITY APPLN. INFO.:			US 1999-140264P P 19990618	
			US 1999-153872P P 19990914	
			US 1999-166573P P 19991119	
			WO 2000-US16591 W 20000616	

AB The present invention relates to novel **ABC1** polypeptides and nucleic acid mols. encoding the same. The invention also relates to recombinant vectors, host cells, and compns. comprising **ABC1** polynucleotides, as well as to methods for producing **ABC1**

polypeptides. The invention also relates to antibodies that bind specifically to **ABC1** polypeptides. In addn., the invention relates to methods for increasing cholesterol efflux as well as to methods for increasing **ABC1** expression and activity. The present invention further relates to methods for identifying compds. that modulate the expression of **ABC1** and methods for detecting the comparative level of **ABC1** polypeptides and polynucleotides in a mammalian subject. The present invention also provides kits and compns. suitable for screening compds. to det. the **ABC1** expression modulating activity of the compd., as well as kits and compns. suitable to det. whether a compd. modulates **ABC1**-dependent cholesterol efflux.

L4 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:666871 CAPLUS

DOCUMENT NUMBER: 133:262303

TITLE: Human **ABC1** transporter and DNA and methods for modulating cholesterol levels and diagnosing disease

INVENTOR(S): Hayden, Michael R.; Wilson, Angela R.; Pimstone, Simon N.

PATENT ASSIGNEE(S): University of British Columbia, Can.; Xenon Bioresearch, Inc.

SOURCE: PCT Int. Appl., 229 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000055318	A2	20000921	WO 2000-IB532	20000315
WO 2000055318	A3	20010322		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1100895	A2	20010523	EP 2000-917240	20000315
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

US 1999-124702P	P	19990315
US 1999-138048P	P	19990608
US 1999-139600P	P	19990617
US 1999-151977P	P	19990901
WO 2000-IB532	W	20000315

AB The invention features **ABC1** nucleic acids and proteins for the diagnosis and treatment of abnormal cholesterol regulation. The invention also features methods for identifying compds. for modulating cholesterol levels in an animal (e.g., a human). Thus, **ABC** transporter gene **ABC1** of chromosome 9 has been identified as the gene involved in Tangier disease and familial HDL deficiency. Many polymorphisms, and mutations (deletion, substitution, nonsense, frameshift, and splicing-altering), have been identified. Many of these correlate with disease; some create/delete restriction sites. The cDNA for **ABC1** has been cloned and sequenced. The protein encoded by the cDNA has an addnl. 60 amino acids relative to that previously reported: these extra amino acids were shown to be present in vivo and to play an essential part in the activity of the protein. The **ABC1** protein has been shown to transport cholesterol. The **ABC1** gene was found to have 49

exons. The **sequence** of each exon with surrounding introns is presented.

L4 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:401986 CAPLUS

DOCUMENT NUMBER: 133:38258

TITLE: Liver X receptors, retinoid X receptors, and the ABC-1 transporter in modulation of cholesterol metabolism

INVENTOR(S): Mangelsdorf, David J.; Repa, Joyce J.; Dietschy, John M.; Turley, Stephen D.

PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA

SOURCE: PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000034461	A2	20000615	WO 1999-US29497	19991210
WO 2000034461	A3	20001109		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1998-111894P A1 19981210

AB The present invention relates to compns. and methods for reducing cholesterolemia and its effects. More specifically, the invention is directed, in one embodiment, to methods for screening for compds. that affect cholesterol levels generally, and in particular, that affect the absorption of cholesterol. The invention also is directed to methods of screening for compds. that increase bile acid synthesis. In so doing, the inventors describe useful transgenic cells and animals which lack one or both alleles of the liver x receptor-.alpha. (LXR.alpha.) gene. Also provided are therapeutic methods designed to reduce cholesterol levels in suitable subjects. The redn. may be effected by decreasing cholesterol absorption, increasing bile acid synthesis, or combinations thereof. Particularly useful in decreasing cholesterol absorption are retinoid X receptor (RXR) agonists, for example, rexinoid compds. Therapeutic intervention in cholesterol biosynthesis and diet are addnl. adjunct therapies. In addn., the present invention relates to candidate compds. that modulate the expression of ABC-1 in a cell that expresses RXR. Methods of identifying and making a modulator of ABC-1 are disclosed.

L4 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:227775 CAPLUS

DOCUMENT NUMBER: 132:275181

TITLE: ATP-binding cassette genes and proteins for diagnosis and treatment of lipid disorders and inflammatory diseases

INVENTOR(S): Schmitz, Gerd; Klucken, Jochen

PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 154 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000018912	A2	20000406	WO 1999-EP6991	19990921
WO 2000018912	A3	20000817		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2344107	AA	20000406	CA 1999-2344107	19990921
AU 9959804	A1	20000417	AU 1999-59804	19990921
EP 1115865	A2	20010718	EP 1999-969740	19990921
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002525111	T2	20020813	JP 2000-572359	19990921
PRIORITY APPLN. INFO.:			US 1998-101706P	P 19980925
			WO 1999-EP6991	W 19990921

AB Cholesterol-responsive genes are identified by the differential display method in human monocytes from peripheral blood that were subjected to macrophage differentiation and cholesterol loading with acetylated LDL and subsequent deloading with HLD3. In an initial screen ABCG8 (ABC8), a member of the rapidly growing family of ABC (ATP-binding cassette) transport systems that couple the energy of ATP hydrolysis to the translocation of solutes across biol. membranes, was identified as a cholesterol-sensitive switch. ABCG1 is upregulated by M-CSF-dependent phagocytic differentiation but expression is massively induced by cholesterol loading and almost completely set back to differentiation-dependent levels by HDL3. In a more detailed anal., 18 already characterized ABC members and 2 Fragment **sequences** were analyzed in monocyte/macrophage cells by RT-PCR as cholesterol sensitive. The most sensitive gene was ABCG1, which is the human homolog of the Drosophila white gene. Sequencing of the **promoter** of ABCG1 shows important transcription factor-binding sites relevant for phagocytic differentiation and lipid sensitivity. Antisense treatment of macrophages during cholesterol loading and HDL3-mediated deloading clearly identified ABCG1 as a cholesterol transporter. Among the other cholesterol-sensitive genes, ABCA1 (**ABC1**) was further characterized, and identified in the mouse as an interleukin-1 β . transporter involved also in apoptotic cell processing. Modulation of the activity of transmembrane proteins belonging to the ATP binding cassette transporter protein family which are etiol. involved in cholesterol-riven atherogenic processes and inflammatory diseases like psoriasis, lupus erythematoses and others provides therapeutic means to treat such diseases. Furthermore, detection of herein identified ABC transporter proteins of their resp. biochem. activities involved in such atherogenic and inflammatory processes provides diagnostic means for clin. application of diagnosis and monitoring of dyslipidemias, atherosclerosis or inflammatory diseases like psoriasis and lupus erythematoses.

L4 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 2
 ACCESSION NUMBER: 2000:646759 CAPLUS
 DOCUMENT NUMBER: 134:158382
 TITLE: Sterol-dependent transactivation of the **ABC1**
promoter by the liver X receptor/retinoid X
 receptor
 AUTHOR(S): Costet, Philippe; Luo, Yi; Wang, Nan; Tall, Alan R.
 CORPORATE SOURCE: Division of Molecular Medicine, Department of
 Medicine, Columbia University, New York, NY, 10032,
 USA

SOURCE: Journal of Biological Chemistry (2000), 275(36),
28240-28245
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular
Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Tangier disease, a condition characterized by low levels of high d.
lipoprotein and cholesterol accumulation in macrophages, is caused by
mutations in the ATP-binding cassette transporter **ABC1**. In
cultured macrophages, **ABC1** mRNA was induced in an additive
fashion by 22(R)-hydroxycholesterol and 9-cis-retinoic acid (9CRA),
suggesting induction by nuclear hormone receptors of the liver X receptor
(LXR) and retinoid X receptor (RXR) family. We cloned the 5'-end of the
human **ABC1** transcript from cholesterol-loaded THP1 macrophages.
When transfected into RAW macrophages, the upstream **promoter** was
induced 7-fold by 22(R)-hydroxycholesterol, 8-fold by 9CRA, and 37-fold by
9CRA and 22(R)-hydroxycholesterol. Furthermore, **promoter**
activity was increased in a sterol-responsive fashion when cotransfected
with LXR.alpha./RXR or LXR.beta./RXR. Further expts. identified a direct
repeat spaced by four nucleotides (from -70 to -55 base pairs) as a
binding site for LXR.alpha./RXR or LXR.beta./RXR. Mutations in this
element abolished the sterol-mediated activation of the **promoter**.
The results show sterol-dependent transactivation of the **ABC1**
promoter by LXR/RXR and suggest that small mol. agonists of LXR
could be useful drugs to reverse foam cell formation and atherogenesis.
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE
3

ACCESSION NUMBER: 2000:438477 BIOSIS
DOCUMENT NUMBER: PREV200000438477
TITLE: **ABC1** gene expression and ApoA-I-mediated
cholesterol efflux are regulated by LXR.
AUTHOR(S): Schwartz, Karen; Lawn, Richard M.; Wade, David P. (1)
CORPORATE SOURCE: (1) CV Therapeutics Inc., 3172 Porter Drive, Palo Alto, CA,
94304 USA
SOURCE: Biochemical and Biophysical Research Communications,
(August 11, 2000) Vol. 274, No. 3, pp. 794-802. print.
ISSN: 0006-291X.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English

AB ATP-binding cassette transporter 1 (**ABC1**) mediates the active
efflux of cholesterol from cells to apolipoproteins. To study the
mechanisms of regulation of **ABC1** gene expression, RAW 264.7
macrophages were transiently transfected with **ABC1**
promoter-luciferase reporter gene-fusion constructs. Transcription
from a 1.64 kb fragment was induced by cholesterol loading but was not
responsive to cAMP. Treatment of the cells with 9-cis retinoic acid or
20(S)-hydroxycholesterol, ligands for the nuclear receptors LXR and RXR,
resulted in a marked induction of luciferase expression. The responsible
control element was mapped to an imperfect direct repeat of the nuclear
receptor half-site TGACCT separated by four bases (DR-4) that binds
LXR/RXR heterodimers. Endogenous **ABC1** gene expression in RAW
cells and apolipoprotein A-I mediated cholesterol efflux were also
upregulated by both receptor ligands. These findings raise the possibility
that ligands that activate the LXR-RXR heterodimer may be useful for the
therapeutic modulation of the **ABC1** pathway.

L4 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 4
ACCESSION NUMBER: 2000:293507 CAPLUS
DOCUMENT NUMBER: 133:188749

TITLE: Analysis of hABC1 gene 5' end: additional peptide
sequence, promoter region, and four
polymorphisms

AUTHOR(S): Pullinger, Clive R.; Hakamata, Hideki; Duchateau,
Philippe N.; Eng, Celeste; Aouizerat, Bradley E.; Cho,
Min H.; Fielding, Christopher J.; Kane, John P.

CORPORATE SOURCE: Department of Physiology, University of California,
San Francisco, CA, USA

SOURCE: Biochemical and Biophysical Research Communications
(2000), 271(2), 451-455
CODEN: BBRCA9; ISSN: 0006-291X

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Evidence linking mutations in ATP-binding-cassette transporter gene 1 (**ABC1**) to Tangier disease suggests it functions in the active transport of free cholesterol out of cells. Since its mRNA level is regulated in response to cellular cholesterol stores, it is of interest to explore its **promoter** response elements, and to investigate polymorphisms for their contributions to the prevalence of low levels of HDL in the population that promotes premature coronary heart disease. Investigation of the 5' end of the gene by 5' RACE anal. revealed 455 nucleotides addnl. to published **sequences**, and predicts another 60 amino acid N-terminal residues, resulting in a 2261-residue protein. Protein **sequence** anal. predicts a membrane-spanning region and possible signal peptide. The 5' flanking region was located by a Human Research Project BLAST search. This region contains regulatory elements that potentially control **ABC1** gene expression. In addn. to numerous SP1 binding sites there are four putative sterol regulatory elements (SREs). Our studies uncovered three single nucleotide substitution polymorphisms, one in the **promoter** region and two in the 5' untranslated region (5'UTR), plus an insertion/deletion polymorphism. (c) 2000 Academic Press.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 21 OF 23 MEDLINE DUPLICATE 5

ACCESSION NUMBER: 1999126354 MEDLINE

DOCUMENT NUMBER: 99126354 PubMed ID: 9927411

TITLE: An ATP-driven efflux pump is a novel pathogenicity factor in rice blast disease.

AUTHOR: Urban M; Bhargava T; Hamer J E

CORPORATE SOURCE: Department of Biological Sciences, Purdue University, West Lafayette, IN 47907, USA.

SOURCE: EMBO JOURNAL, (1999 Feb 1) 18 (3) 512-21.
Journal code: 8208664. ISSN: 0261-4189.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

OTHER SOURCE: GENBANK-AF032443

ENTRY MONTH: 199903

ENTRY DATE: Entered STN: 19990326
Last Updated on STN: 19990326
Entered Medline: 19990316

AB Cells tolerate exposure to cytotoxic compounds through the action of ATP-driven efflux pumps belonging to the ATP-binding cassette (ABC) superfamily of membrane transporters. Phytopathogenic fungi encounter toxic environments during plant invasion as a result of the plant defense response. Here we demonstrate the requirement for an ABC transporter during host infection by the fungal plant pathogen *Magnaporthe grisea*. The **ABC1** gene was identified in an insertional mutagenesis screen for pathogenicity mutants. The **ABC1** insertional mutant and a gene-replacement mutant arrest growth and die shortly after penetrating

either rice or barley epidermal cells. The **ABC1**-encoded protein is similar to yeast ABC transporters implicated in multidrug resistance, and **ABC1** gene transcripts are inducible by toxic drugs and a rice phytoalexin. However, **abc1** mutants are not hypersensitive to antifungal compounds. The non-pathogenic, insertional mutation in **ABC1** occurs in the **promoter** region and dramatically reduces transcript induction by metabolic poisons. These data strongly suggest that *M. grisea* requires the up-regulation of specific ABC transporters for pathogenesis; most likely to protect itself against plant defense mechanisms.

L4 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 6
 ACCESSION NUMBER: 1998:536552 CAPLUS
 DOCUMENT NUMBER: 129:271298
 TITLE: Organization of the ABCR gene: analysis of **promoter** and splice junction **sequences**
 AUTHOR(S): Allikmets, Rando; Wasserman, Wyeth W.; Hutchinson, Amy; Smallwood, Philip; Nathans, Jeremy; Rogan, Peter K.; Schneider, Thomas D.; Dean, Michael
 CORPORATE SOURCE: Intramural Research Support Program, SAIC-Frederick, Frederick, MD, 21702, USA
 SOURCE: Gene (1998), 215(1), 111-122
 CODEN: GENED6; ISSN: 0378-1119
 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Mutations in the human ABCR gene have been assocd. with the autosomal recessive Stargardt disease (STGD), retinitis pigmentosa (RP19), and cone-rod dystrophy (CRD) and have also been found in a fraction of age-related macular degeneration (AMD) patients. The ABCR gene is a member of the ATP-binding cassette (ABC) transporter superfamily and encodes a rod photoreceptor-specific membrane protein. The cytogenetic location of the ABCR gene was refined to 1p22.3-1p22.2. The intron/exon structure was detd. for the ABCR gene from overlapping genomic clones. ABCR spans over 100 kb and comprises 50 exons. Intron/exon splice site **sequences** are presented for all exons and analyzed for information content (Ri). Nine splice site **sequence** variants found in STGD and AMD patients are evaluated as potential mutations. The localization of splice sites reveals a high degree of conservation between other members of the **ABC1** subfamily, e.g. the mouse **Abc1** gene. Anal. of the 870-bp 5' upstream of the transcription start **sequence** reveals multiple putative photoreceptor-specific regulatory elements including a novel retina-specific transcription factor binding site. These results will be useful in further mutational screening of the ABCR gene in various retinopathies and for detg. the substrate and/or function of this photoreceptor-specific ABC transporter.
 REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 7
 ACCESSION NUMBER: 1988:107186 CAPLUS
 DOCUMENT NUMBER: 108:107186
 TITLE: **Sequence** of the bacteriophage P22 anti-recBCD (abc) genes and properties of P22 abc region deletion mutants
 AUTHOR(S): Murphy, Kenan C.; Fenton, Anita C.; Poteete, Anthony R.
 CORPORATE SOURCE: Med. Sch., Univ. Massachusetts, Worcester, MA, 01605, USA
 SOURCE: Virology (1987), 160(2), 456-64
 CODEN: VIRLAX; ISSN: 0042-6822
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The nucleotide **sequence** of a segment of the phage P22 chromosome

to the left (downstream in the PL operon) of the erf gene was detd. Previous studies (A. C. Fenton and A. R. Poteete, 1984) have shown that this region encodes a function that is required for efficient growth of P22 in wild-type, but not in recB Salmonella. The gene or genes encoding this function were designated abc (anti-recBCD). The DNA **sequence** reveals 3 open reading frames that potentially encode polypeptides with mol. wts. of 10,900, 11,600, and 6600 (in order of transcription). P22 deletion mutants lacking each of the open reading frames were constructed. In addn., plasmids were constructed placing each of the open reading frames under control of the lac UV5 **promoter**. The phenotypes of the deletion mutants, and the results of plasmid-phage complementation tests, indicate that Abc activity depends primarily on **sequences** that encode the 11.6-kDa polypeptide; the 10.9-kDa polypeptide-encoding **sequence** makes a minor contribution to Abc activity as well. These **sequences** have been designated abc2 and **abc1**, resp. The 6.6-kDa polypeptide is apparently uninvolved.